REMARKS

Claims 1, 11 and 22 have been amended. Claims 1-11 and 13-31 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Finality of the Office Action:

Applicants note that claims 6, 9 and 10 currently stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kowert (U.S. Patent 5,649,129) (hereinafter, "Kowert"). However, none of these claims previously stood rejected on any ground with respect to Kowert. Further, none of these claims has previously been amended, nor has claim 1 from which each of these claims depends. The instant rejection of claims 6, 9 and 10 is thus a new ground of rejection not necessitated by Applicants' amendment. Therefore, Applicants submit that the finality of the instant Office Action is improper and request that the above amendments to claims 1, 11 and 22 be entered.

Moreover, the rejection of claim 1 based on Kowert was changed from a § 102 rejection to a § 103 rejection, which also constitutes a new ground of rejection not necessitated by amendment. Accordingly, the finality of the instant Office Action must be withdrawn and the above amendments to claims 1, 11 and 22 entered.

Section 103(a) Rejection:

The Examiner rejected claims 1-11 and 13-31 under 35 U.S.C. § 103(a) as being unpatentable over Kowert. Applicants respectfully traverse this rejection for at least the following reasons.

The Examiner acknowledges that Kowert does not disclose an application configured to retrieve captured data events from a region of a data event buffer and to

display the retrieved data events substantially in real time with respect to the occurrence of the corresponding captured data events on a nondeterministic data bus, as required by claim 1. However, the Examiner asserts that the claim recitation "substantially in real time" does not "expressly define the time between the occurrence of the captured data event and the display." Although Applicants submit that one of ordinary skill in the art would readily identify the meaning of "substantially in real time" as a limitation on the performance of the recited claim elements, Applicants have amended claim 1 to further clarify this language. Specifically, claim 1 as amended specifies that the application and data capture logic of the recited system are further configured such that a given one of the data events occurring on said nondeterministic data bus with a given minimum duration is guaranteed to be displayed by the application within a given maximum latency after the occurrence of the given data event.

In rejecting claim 1, the Examiner asserts that "a given maximum latency" for display does not clearly define what is meant by "substantially in real time." Applicants note that the question of a specific maximum latency for processing of some computing event does not by itself determine whether that event is processed "substantially in real time." That is, there does not exist a standard threshold latency in the art against which real-time vs. non-real time performance is judged, such that, e.g., an event that is processed within 1 millisecond of its occurrence is deemed to be processed "substantially in real time" whereas an event that is processed within 1 second of its occurrence is not. Rather, Applicants point to the language of claim 1, which specifically recites that a given data event occurring on a nondeterministic data bus is guaranteed to be displayed by the application within a given maximum latency after the occurrence of the given data That is, as discussed above, the given maximum latency is not alone event. determinative, and may in fact vary in different embodiments. Instead, claim 1 requires that the given data event be guaranteed to be displayed within this maximum latency, whatever this latency may be.

To reiterate, the question of display of a captured data event occurring "substantially in real time" is not simply a function of an absolute maximum latency, as

the Examiner seems to suggest, but rather requires that the latency be guaranteed with respect to the displaying. As noted in Applicants' specification, this is a nontrivial problem with respect to nondeterministic data buses, and as already discussed above, Kowert does not disclose any aspect of the display of captured data events substantially in real time as recited in claim 1. Specifically, as argued in response to the previous Office Action, assigning of a timestamp indicative of a capture time to a captured data event as described in Kowert does not entail any aspect of the display of such data events substantially in real time as recited in claim 1.

Applicants' undersigned attorney is the inventor of the Kowert reference cited by the Examiner and hereby asserts that Kowert (U.S. Patent 5,649,129) does not describe that a given data event occurring on a nondeterministic data bus is guaranteed to be displayed by the application within a given maximum latency after the occurrence of the given data event.

The Examiner further asserts that the limitation "substantially in real time" is "not structurally involved in the elements of the recited system" and is thus deemed to be nonfunctional descriptive material. Applicants traverse the Examiner's remarks. As noted in MPEP 2106 IV.B.1.b, cited by the Examiner, "Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process [or] machine..." This section specifically characterizes as nonfunctional descriptive material those types of descriptive material such as "mere arrangements or compilations of facts or data" that "are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer..."

The cited reference to the MPEP has no relevance to claim 1. Rather, Applicants' recitation "substantially in real time" constitutes an <u>express functional requirement on the behavior of the recited system</u>. That is, this limitation does not describe "mere... facts or data" that are "merely stored," but rather sets forth an explicit constraint on the behavior

of the recited application. Applicants further note that in claim 1 as amended, the recitation that the given data event is guaranteed to be displayed by the application within a given maximum latency is described as an explicit functional requirement of the configuration of the recited application and data capture logic. Applicants therefore submit that the recitations of claim 1 in question are in fact definite limitations functionally interrelated with other claim elements and that distinguish substantively over Kowert.

For at least the foregoing reasons, Applicants submit that independent claim 1 is patentably distinguishable over Kowert, as are independent claims 11 and 22 which recite limitations similar to claim 1.

With reference to claims 2, 3, 13, 14, 20, 23, 24 and 30, the Examiner states that Kowert does not disclose the limitation where the data event buffer is circular or linear, but that "one of ordinary skill would readily recognize that a circular or linear buffer is well known in the art, thereby making use of these types of well known buffers obvious to one of ordinary skill." Applicants traverse the Examiner's statements and reiterate arguments made in response to similar statements of the Examiner made in the previous Office Action. Applicants note that the Examiner has made no attempt to rebut Applicants' previous arguments with respect to these claims.

These features may be well known in other contexts. However, as the Federal Circuit stated in *In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000):

Most if not all inventions arise from a combination of old elements. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the <u>desirability</u> of making the specific combination that was made by the applicant. (emphasis added)

Thus, the Examiner's assertion that circular and linear data event buffers are well known does not establish that the prior art teaches Applicants' specifically claimed application of these elements in combination with the other claimed elements. The evidence of record

does not indicate the <u>desirability</u> of circular and linear data event buffers as combined in Applicants' claims. Moreover, as the Court of Appeals for the Federal Circuit recently explained in *In re Sang Su Lee*, Docket No. 00-1158 (Fed. Cir. January 18, 2002), conclusory statements such as those provided by the Examiner that a claim limitation is well known or common knowledge do not fulfill the Examiner's obligation. "Deficiencies of the cited references cannot be remedied by the [Examiner's] general conclusions about what is 'basic knowledge' or 'common sense." *In re Zurko*, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). "Common knowledge and common sense ... do not substitute for authority." *In re San Su Lee*. Common knowledge "does not in and of itself make it so" absent <u>evidence</u> of such knowledge. *Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999). Thus, Applicants submit that the rejection of these claims is improper.

With respect to claims 9, 20 and 30, the Examiner states that "Kowert teaches having a sample index value for the captured data events, therefore, it would have been obvious that transmissions related to the sample index value is performed via a DMA transfer." Notwithstanding the fact that the Examiner has failed to provide any support for this assertion, and making reference to the comments in the previous paragraph, Applicants fail to discern any necessary connection between a sample index value and a DMA transfer. Moreover, Applicants note that claims 9, 20 and 30 recite additional limitations with respect to pausing DMA transfer activity dependent upon a sample index value, which behavior is neither disclosed nor suggested by Kowert. Applicants note that the Examiner has made no effort to rebut these arguments, which were submitted by Applicants in response to the previous Office Action.

Applicants further note that numerous ones of the dependent claims recite additional features not taught or suggested by Kowert. However, as the rejection of the independent claims has been shown to be unsupported by the cited art, no further discussion of the dependent claims is necessary at this time.

CONCLUSION

Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above-referenced application from becoming abandoned, Applicants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5150-84100/RCK.

Also enclosed herewith are the following items:

Return Receipt Postcard

Respectfully submitted,

Robert C. Kowert Reg. No. 39,255

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